## Stat 602 Homework 2

## Kiegan Rice and Nate Garton $Due \ 3/4/2019$

Problem 1
Problem 4.3
Problem 4.4
Problem 5.1
Note: Most of this is on $602~\mathrm{HW2}$ from $2015$ (problem $6$ )
Problem 2
Part a
Part b
Problem 3
Note: This is Stat 602 HW3 from 2015 (problem 21)
Problem 4
Note: This is Stat 602 HW3 from 2015 (problem 22)
Note: There is some crossover with 502X HW2 Q15(a) here.
Part a
Part b
Part c
Problem 5
Note: This is Stat 602 HW3 from 2015 (problem 23)
Part a
Part b
Problem 6

Note: This is 502X~HW~2~Q16(a) (Kiegan will do this problem)

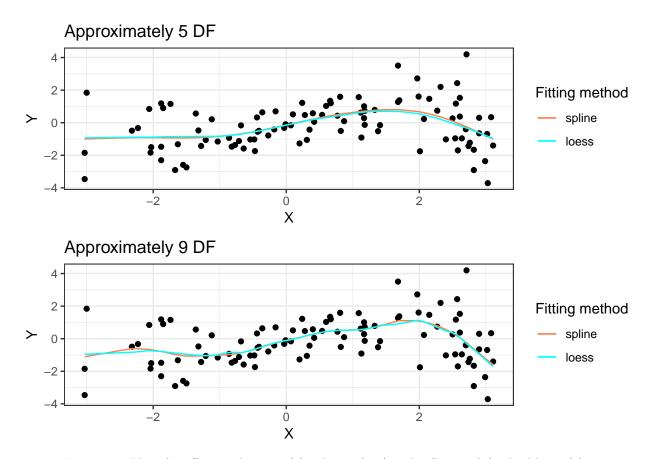


Figure 1: Plots for effective degrees of freedom 5 (top) and 9 (bottom) for Problem 6(a).

## Part a

The plots for this problem can be seen in Figure 1.

Problem 7
kNN
elastic net
PCR
PLS
MARS (in earth)
Problem 8
Part a
Part b
Part c

Part d